

ORIGINAL

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OCT 25 1999

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

October 25, 1999

BY MESSENGER

EX PARTE OR LATE FILED

Magalie Roman Salas, Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W. - Suite TW-A325  
Washington, D.C. 20554

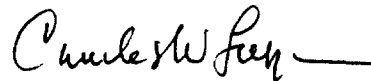
Re: WT Docket No. 99-168  
*Ex Parte Presentation*  
Service Rules for the 746-764 and 776-794 MHz Bands,  
And Revisions to Part 27 of the Commission's Rules

Dear Ms. Salas:

On October 25, 1999, Ruth Milkman of Lawler, Metzger & Milkman spoke by telephone with Adam Krinsky of Commissioner Tristani's office regarding a proposal by FreeSpace Communications for licensing spectrum for commercial services in the 746-764 and 776-794 MHz bands. That proposal is described in the enclosed written *ex parte* slide presentation dated October 18, 1999 and in the enclosed written *ex parte* letter filed in this docket by FreeSpace Communications on October 13, 1999. Copies of both these written *ex parte* presentations were delivered to Mr. Krinsky on October 25.

An original and one copy of this letter and enclosures are being provided to you for inclusion in the public record of the above-referenced proceeding.

Sincerely,



Charles W. Logan

cc: Adam Krinsky (w/enclosures) (By Messenger)

Enclosures

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# FREESPACE COMMUNICATIONS

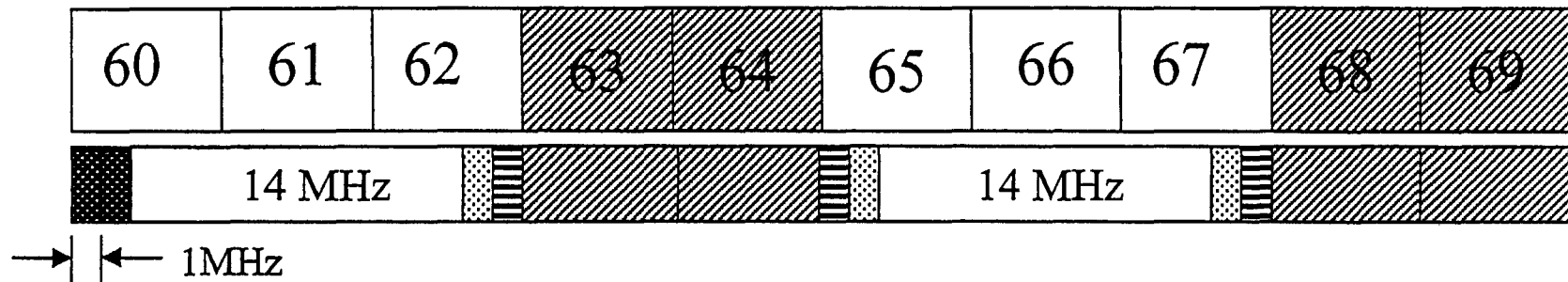
*Ex Parte Presentation*

October 18, 1999

Service Rules for 746-764/776-794 MHz Bands

WT Docket No. 99-168

# FreeSpace Communications Channels 60-69 Proposal



**License eight 1MHz, paired channels for innovative, low power uses that protect public safety band:**

 4mW/kHz
  20mW/kHz
  > 20mW/kHz

 Public Safety

**License remaining 28MHz for higher powered mobile and fixed wireless services:**

 Two 14MHz bands for mobile & fixed wireless services

# Public Interest Benefits

- Creates *guard bands* to provide maximum interference protection to public safety operations in 764-776/794-806 MHz band.
- Supports *new, innovative* uses of spectrum such as FreeSpace Communications' broadband wireless voice and data service.
- Extends wireless and internet services to *underserved communities*.

# Protecting Public Safety

- *The Challenge:* FCC “must limit types and nature of non-broadcast commercial mobile radio operations on adjacent channels and/or provide a sufficient guard band within the commercial spectrum to prevent interference with public safety systems.” *APCO Comments at 3.*
- *The FreeSpace Solution:* Establish transmit power limits in guard bands adjacent to public safety spectrum that will provide maximum interference protection to current and future public safety operations.

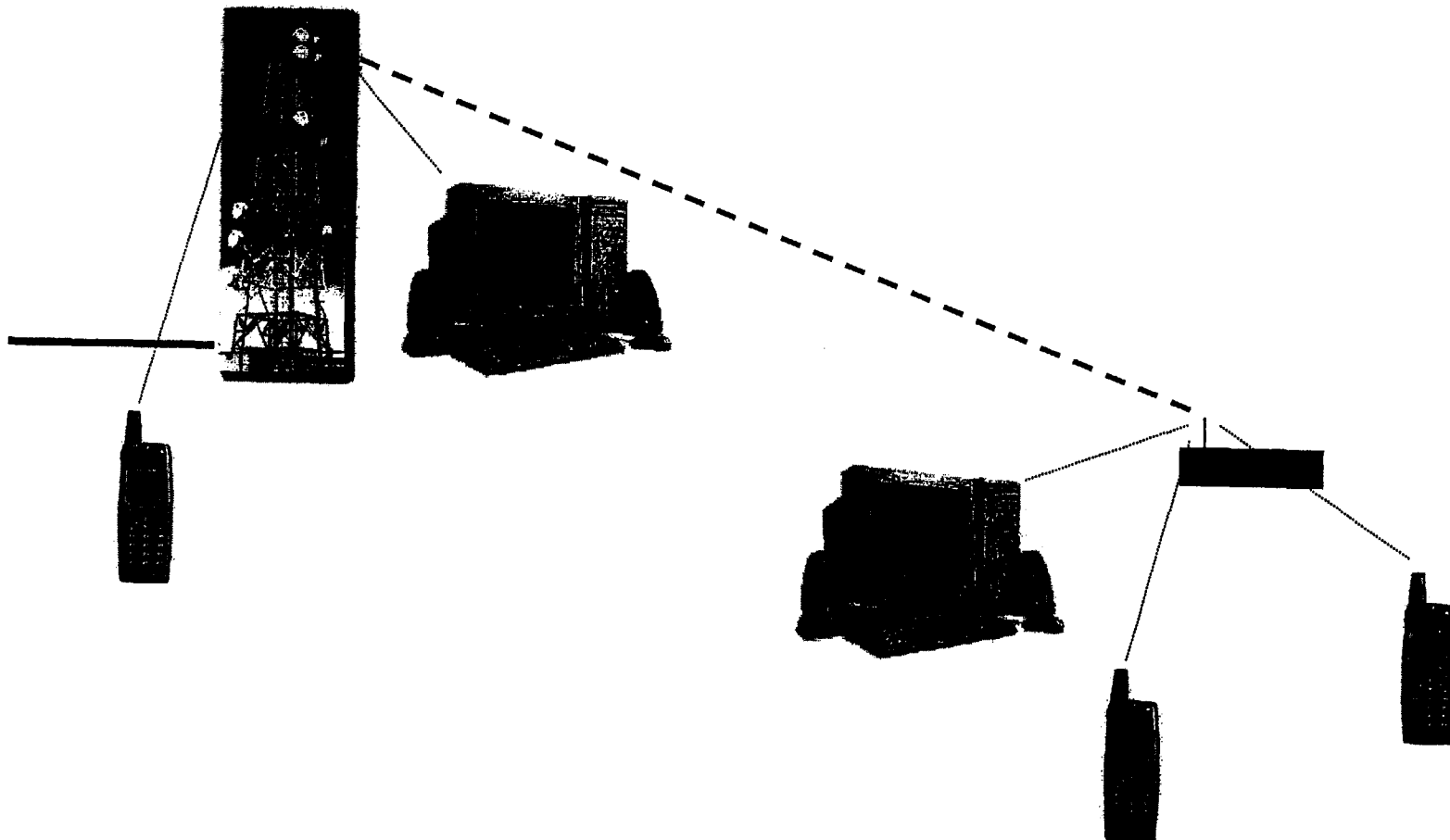
# Use Power Spectral Density Limits to Control Interference

- Prevents concentration of transmit power in narrow bandwidth channels adjacent to public safety
- Allows wireless systems to be engineered for services rather than around channel bandwidths
  - Distance, transmit power, and channel bandwidth are interrelated
  - PSD limits allow transmit power to be coupled to channel bandwidth, causing distance to be independent of channel bandwidth

# The FreeSpace System

- Offers wireless voice and data, including broadband wireless internet connection.
- Uses innovative technology that promotes efficient use of the spectrum.
- Technology involves significantly lower infrastructure, equipment and maintenance costs, which means less expensive wireless services for consumers.

# Network Architecture





# Bringing the Telecommunications Revolution to Underserved Communities

- *The Challenge:* Bring affordable telecommunications services to underserved areas, including tribal lands and rural areas.
- *Existing Obstacles:* High infrastructure costs, and high monthly fees for consumers.
- *The FreeSpace Solution:* Technology that significantly reduces infrastructure and equipment costs, making it possible to offer very affordable wireless voice and data services to *all* Americans.

# Nationwide Licensing and Bidding Credits

- License the eight 1 MHz, paired channels (with a minimum of 14 MHz separation) on a *nationwide basis*.
  - Provides for a ubiquitous, wireless network.
  - Promotes economies of scale.
  - Received strong support in comments.
- Adopt the small business definitions proposed in the *NPRM* and use bidding credits to promote small business entry and entrepreneurial innovation.

# Coexisting with Broadcast Facilities

- FreeSpace system makes it possible to create a nationwide wireless network that protects existing broadcast stations in Channels 60-69.
- Protect existing broadcast stations from interference until the end of the DTV transition, but do *not* authorize new broadcast facilities in Channels 60-69.
  - Received strong support in comments.

## The FCC Should Not Set Aside Spectrum For Particular Uses

- Section 337(a) requires the FCC to allocate the 746-764/776-794 MHz bands “for commercial use to be assigned by competitive bidding.”
- Exclusive set-aside for private radio, either directly or through band manager concept, is contrary to this statutory directive given well understood distinction between such private uses and “commercial uses.”
- Exclusive set-asides reduce auction revenues and are contrary to strong FCC policy of using auctions and the marketplace to maximize the efficient use of the spectrum.